Demand for Grants 2024-25 Analysis
Agriculture and Farmers Welfare

The Ministry of Agriculture and Farmers' Welfare has two Departments: (i) Agriculture and Farmers Welfare, which implements policies and programmes related to farmer welfare and manages agriculture inputs, and (ii) Agricultural Research and Education, which coordinates and promotes agricultural research and education.[1] This note examines the budget allocations to the Ministry and its expenditure, and discusses issues related to fixing the MSP, output and employment in the sector, restrictions on trade, and agricultural markets.

Overview of Finances

In 2024-25, the Ministry of Agriculture has been allocated Rs 1,32,470 crore which is 2.7% of the total budgeted expenditure of the central government. In 2024-25, the Ministry's expenditure is estimated to be 5% higher as compared to the revised estimate of 2023-24 of Rs 1,26,666 crore.

Table 1: Ministry's expenditure in 2024-25 (Rs crore)

Department	2022-23 Actuals	2023-24 Revised	2024-25 Budgeted	% change 2024-25 BE over 2023-24 RE
Agriculture and Farmers Welfare	99,877	1,16,789	1,22,529	5%
Agricultural Research and Education	8,400	9,877	9,941	1%
Total	**1,08,277**	**1,26,666**	**1,32,470**	**5%**

Sources: Expenditure Budget, Union Budget 2024-25; PRS.

Within the Ministry, 92% of the allocation made for 2024-25 is to be spent on the Department of Agriculture and Farmers Welfare while the remaining 8% will be spent under the Department of Agricultural Research and Education. The Department of Agriculture and Farmers Welfare is responsible for implementing various key schemes run by the central government in the agriculture sector. This includes Pradhan Mantri Kisan Samman Nidhi (PM-Kisan), Modified Interest Subvention Scheme (MISS), and Crop Insurance Scheme. The Department is also responsible for Rashtriya Krishi Vikas Yojana (RKVY) and Krishionnati Yojana which are centrally sponsored schemes.

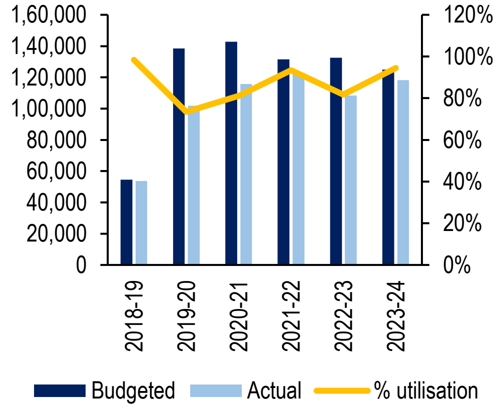
Table 2: Expenditure on key schemes under the Department of Agriculture and Farmers Welfare (Rs crore)

Scheme	2022-23 Actuals	2023-24 Revised	2024-25 Budgeted	% change in 2024-25 BE over 2023-24 RE
PM-KISAN	58,254	60,000	60,000	0%
MISS	17,998	18,500	22,600	22%
Crop Insurance Scheme	10,296	15,000	14,600	-3%
RKVY	5,247	6,150	7,553	23%
Krishionnati Yojana	4,716	6,378	7,447	17%

Sources: Expenditure Budget, Union Budget 2024-25; PRS.

PM-KISAN accounts for almost half of the Department's expenditure in 2024-25. The allocation for PM-KISAN is not budgeted to increase as the quantum of cash transfers and the beneficiaries under the scheme are largely unchanged. The expenditure on MISS in 2024-25 is budgeted to increase by 22% over the revised estimate of 2023-24. Under MISS, concessional short-term loans are provided to farmers engaged in crop husbandry and other allied activities such as animal husbandry and dairying.

Figure 1: Utilisation of funds by the Ministry (Rs crore)



Note: For 2023-24, actual figures are as per provisional accounts.
Sources: Union Budget Documents of various years; PRS.

Utilisation of funds: Between 2018-19 and 2023-24, the average fund utilisation by the Ministry was around 86% as compared to the budget estimates. Note that from 2019-20 onwards there has been a significant increase in the Ministry's expenditure due to the launch of the PM-KISAN scheme. In 2019-20, fund utilisation by the Ministry was 73%.

Tushar Chakrabarty
tushar@prsindia.org

July 31, 2024

This was due to an actual expenditure of Rs 48,714 crore under the PM-KISAN scheme as compared to budgeted expenditure of Rs 75,000 crore.

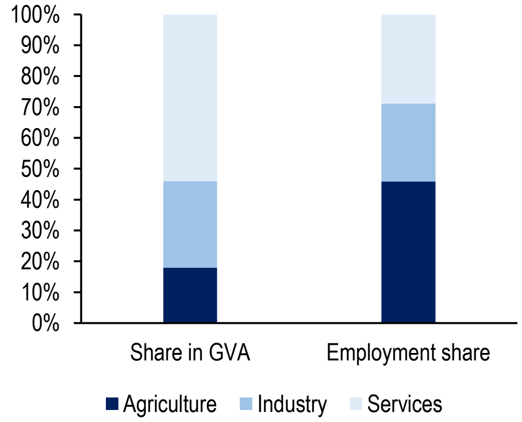
Issues for Consideration

The agriculture sector in India faces several issues such as low growth, climate change, water stress, high cost of production, and low farm income. The section below discusses some of these issues.

Share of economy and employment

The agriculture sector employs the largest share of the workforce in India but contributes the lowest to value addition in the economy. In 2022-23, agriculture employed about 46% of the workforce, and accounted for 18% of India's gross value added (GVA). This implies that the sector generated 18% of the country's income by 46% of its workforce. In contrast, the industry sector employed 25% of the workforce and contributed 28% of the GVA while the services sector employed 29% of the workforce, and contributed 54% of the GVA.

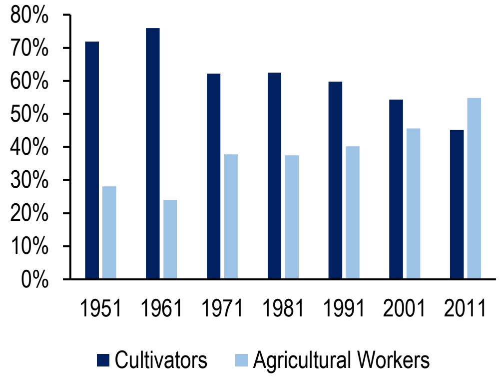
Figure 2: Sectoral share in the gross value added and employment in 2022-23 (%, in current prices)



Note: GVA refers to Gross Value Added, i.e., the share of each sector to the total output produced in the economy.
Sources: Ministry of Statistics and Programme Implementation; Periodic Labour Force Survey 2022-23; PRS.

While the agriculture sector continues to employ a majority of India's workforce, there has been a change in the composition of the workforce employed in agriculture. The share of cultivators in total agricultural workforce reduced from 54% in 2001 to 45% in 2011 while the share of agricultural labourers increased from 46% in 2001 to 55% in 2011. Between 1951 and 2001, the share of cultivators was higher than agricultural workers in the workforce.

Figure 3: Share of cultivators and agricultural workers in total agricultural workforce

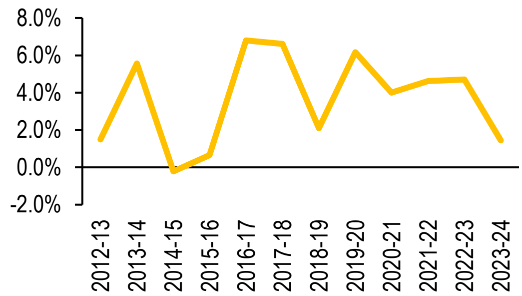


Sources: Agricultural Statistics at a Glance 2022, Ministry of Agriculture and Farmers Welfare; PRS.

Low growth rates in the crop sector

The agriculture sector grew at 1.4% in 2023-24, lowest since 2015-16. Growth in the sector has been volatile, and averaged at 3.6% in the past 12 years. Note that in 2023-24 actual rainfall during the southwest monsoon season of June to September was less than the long period average.[2]

Figure 4: Growth in the agriculture sector lowest since 2015-16

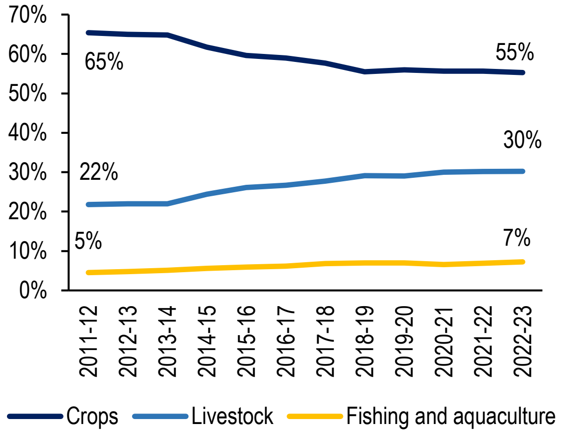


Sources: Ministry of Statistics and Programme Implementation; PRS.

Within agriculture, crop production accounts for over 50% of the total production. The share of crop production in gross agricultural value added (at current prices) has decreased from 65% in 2011-12 to 55% in 2022-23 (see Figure 5). Production of cereals, fruits and vegetables accounted for about 55% of the total crop production in 2022-23.[3] Cereals such as paddy, wheat, maize, and bajra have the highest output.[3]

The share of fishing and aquaculture in agriculture GVA (at current prices) increased from 5% in 2011-12 to 7% in 2022-23 while the share of livestock has increased from 22% to 30% in the same period. Note that the growth in fishing and aquaculture has happened over a low base in 2011-12.

Figure 5: Share of sub-sectors in agricultural output (at current prices)



Sources: Ministry of Statistics and Programme Implementation; PRS.

Coastal aquaculture

Parliament passed a Bill in August 2023 to regulate coastal aquaculture. It amended a 2005 Act which established an authority to regulate coastal aquaculture. The Bill specified that any facility engaged with coastal aquaculture or any allied activity will be regulated as a coastal aquaculture unit. An allied activity can include a nucleus breeding centre, or a hatchery. The Bill permits allied activities to be established in no-development zones of seas and in buffer zones of creeks, rivers, or backwaters.

As of 2023, 45,560 coastal aquaculture farms have registered with the Coastal Aquaculture Authority.[4] In 2021-22, India exported 13.7 lakh tonne of marine products such as shrimp and cuttlefish worth USD 7.8 billion.[5] Frozen shrimp accounts for 53% of marine product exports in terms of quantity and 75% in terms of value.

Minimum Support Prices

Minimum support price (MSP) is the assured price announced by the central government at which foodgrains are procured from farmers for the central pool of foodgrains.[6] The central pool is used for providing foodgrains under the Public Distribution System (PDS) and other welfare schemes. The government notifies MSP for more than 20 crops. However, procurement is limited to largely rice, wheat, coarse grains, pulses (to a limited extent). In 2024, there was a large-scale farmers' agitation where farmers demanded that all crops under MSP should be procured by the government, and that MSP be made a legal guarantee.[7] We discuss the policy implications of expanding procurement to other MSP notified crops. On the one hand, it can incentivise crop diversification, and on the other hand it can lead to higher retail inflation.[8]

The Committee for Doubling Farmers' Income (2017) noted that procurement has largely benefited wheat and paddy growers, for which there is a robust government procurement mechanism.[9,10] It noted that procurement of other MSP notified commodities has not been very encouraging.[9] MSP becomes effective only when supplemented by a robust procurement mechanism whenever market price breaches this assured price.[9] The Committee noted that over time agricultural markets should be strengthened such that government procurement at the MSP becomes the second choice for a farmer.[9]

Presently, the government largely assures procurement for only wheat and rice, which incentivises farmer to cultivate these. This may lead to excess supply of these crops which can lower market price, and also lead to issues such as depleting groundwater table in states like Punjab. Assured procurement for other MSP crops may incentivise farmers to diversify their crops. Diversification may also assist in expanding the dietary options under the National Food Security Act, 2013.[6] The NFSA provides for the diversification of commodities distributed under the PDS over a period of time. However, foodgrains distributed under PDS primarily include only cereals (rice, wheat, and coarse grains). This has not changed since the Act was implemented in 2013 despite certain structural changes in consumption patterns of people.[11] Note that given the changes in nutritional requirements and dietary patterns, the central government has been fixing higher MSPs for pulses and oilseeds.[12]

On the other hand, making MSP a legal guarantee for all 22 crops may lead to higher retail inflation. Inflation refers to the change in prices of a fixed basket of commodities consumed by a typical consumer. Food accounts for about 46% of this basket. If more crops are sold at the MSP, consumers may have to pay more for these crops which can lead to higher retail inflation.

Fixing MSP: In 2006, the National Commission on Farmers (Chair: Dr. M.S. Swaminathan) recommended that MSP for crops should be at least 50% higher than the weighted average cost of production.[13] The Union Budget for 2018-19 had announced that MSP for crops will be fixed at one and a half times of the cost of production.[13] While recommending the MSP with a margin of 50% over cost of production, the Commission for Agricultural Costs and Prices (CACP) considers the A2 plus FL cost.[14] It refers to paid out costs and the imputed value of family labour. However, this 50% margin reduces, if the recommended MSP is compared to costs captured by C2. C2 refers to costs included in A2 plus FL along with rental value of owned land and interest on fixed capital.[14] The National Commission on Farmers had noted that in the long run farmers will be unlikely to cultivate those crops where C2 costs are not recovered. However, when the Commission made this observation, in several states, the C2 cost was higher than the MSP for paddy.[15] In 2023-24, the

MSP for paddy was 1.5 times that of A2 plus FL costs and 1.1 times that of C2 costs.

Table 3: Minimum Support Price (MSP) for crops as a proportion of the cost of cultivating that crop

Crop	MSP for 2023-24		
	MSP (Rs/quintal)	As a proportion of A2+FL cost	As a proportion of C2 cost
Paddy	2,183	1.5	1.1
Wheat	2,275	2.0	1.4

Note: A2+FL refers to paid out costs + cost of family labour; C2 refers to A2+FL+ rental value of owned land + interest on fixed capital.
Sources: Commission for Agricultural Costs and Prices; PRS.

Crop production targets

As per the third advance estimates for 2023-24, production of rice and nutri/ coarse cereals has surpassed the targets (See Table 4). However, production of pulses, sugarcane, and wheat have fallen short of the targets for the year. Total foodgrain production has fallen short by 32 lakh tonnes. Foodgrain includes cereal, millet, and pulses. Rice and wheat are types of cereals.

Table 4: Production of major agricultural crops in 2023-24 (in lakh tonnes)

Commodity	Production	Targets	Targets met
Rice	1,367	1,340	102%
Wheat	1,129	1,140	99%
Cereals	3,044	2,921	104%
Pulses	245	293	84%
Nutri/ Coarse Cereals	547	526	104%
Foodgrain	3,289	3,321	99%
Sugarcane	4,425	4,700	94%

Note: Cereals include rice and wheat; Foodgrain includes cereal, millet, and pulses.
Sources: Ministry of Agriculture and Farmers' Welfare; PRS.

Climate change: The Standing Committee on Agriculture (2024) highlighted that about 51% of the cultivated area in India relies on rainfall, which makes it vulnerable to climatic changes.[16] Frequent extreme weather events across different parts of the country have resulted in significant losses in crop yield and income for farmers.[16] Studies conducted by the Ministry suggest that the heat wave during March 2022 affected wheat production by about 3.5 million tonnes.[16] Similarly, in 2014 and 2015, unseasonal rainfall adversely impacted the cultivation of soybean.[16] Climate forecasting models have projected that average rainfall during monsoon, and the variability of monsoon will rise by the end of the century.[16]

Crop insurance

The government provides farmers with an insurance to protect their yield from non-preventable risks. The central government has been implementing the Pradhan Mantri Fasal Bima Yojana (PM-FBY) and Restructured Weather Based Crop Insurance Scheme (RWBCIS). These schemes seek to provide farmers with affordable crop insurance against risks that may occur anytime during the pre-sowing to the post-harvest stage.[17] Under PMFBY, farmers pay a premium of up to 2% for Kharif crops, 1.5% for Rabi crops, and 5% for horticultural crops of the sum insured.[18] The central government shares the expenditure on premium equally with state governments, except for north-eastern states.[18] The Scheme was made voluntary for farmers in 2020.[19]

In 2024-25, Rs 14,600 crore has been allocated to the scheme, 3% lower than the revised estimates for 2023-24. The Standing Committee on Agriculture (2023) had questioned as to how the Ministry will implement the scheme with rising extreme weather conditions, and a lower budgetary allocation.[20] The Ministry replied that the scheme is demand driven. It also noted that various technological interventions have been made to incorporate information on weather and other natural parameters.[20] Based on the scheme's coverage, additional funds may be sought at the revised estimate stage.[20]

In the last four years, the sum insured has varied between Rs 1.8 lakh crore to Rs 2.8 lakh crore. 8% to 10% of this amount was paid out to settle crop insurance claims.

Table 5: Insurance claims settled under crop insurance schemes (in Rs crore)

Year	Total sum insured	Total claim paid	Claim paid as % of sum insured
2020	1,94,689	19,385	10%
2021	1,82,952	18,264	10%
2022	2,16,643	16,791	8%
2023	2,78,420	7,128	3%

Note: Insurance schemes refer to PMFBY and RWBCIS.
Sources: Pradhan Mantri Fasal Bima Yojana Dashboard; PRS.

Delay by state governments in releasing their share is a major financial constraint in implementing the scheme.[20] Admissible claims under the crop insurance scheme is generally paid by insurance companies within two months of completion of crop cutting experiments/ harvesting period. However, the concerned government must transfer their share of premium subsidy on time.[20] In some states, claim settlement has been delayed by delay in sharing of yield data, late release of state share of premium subsidy, yield related disputes between states and insurance companies, and non-receipt of bank account details of some farmers.[20]

A study conducted by the National Institute of Agricultural Extension Management (under the Ministry of Agriculture and Farmers Welfare) observed certain issues in the implementation of the scheme.[21] A survey of sample farmers in the study suggested that the reach of the scheme was very poor.[21] Small and marginal farmers in rural areas were not aware about the benefits of the scheme. Note that as per the Agriculture Census of 2015-16, 68% of the farm landholdings in India was up to one hectare (marginal holdings) while 18% were between one and two hectare (small holdings).[22] In several cases, purchase of crop insurance is compulsory for availing crop loans/ financial assistance with the insurance premium being deducted at source.[21] Often, farmers do not know about the rate or amount of premium being deducted. The study also found that the survey of damaged crops is not done properly or done in a manner to avoid the claim process.[21]

PM-KISAN

Since February 2019, the central government has been implementing the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN).[23] It is a central sector scheme under which cultivable landholding farmer families are each given Rs 6,000 every year through direct benefit transfer.[23] Beneficiaries of higher economic status such as holders of constitutional posts, employees of central and state governments, income tax payers, and practicing professionals (like doctors and lawyers) are excluded from the scheme.[24] The scheme accounts for almost half of the total expenditure of the Ministry of Agriculture and Farmers Welfare in 2024-25.

In 2018-19 and 2019-20, around three crore and nine crore beneficiaries respectively received the income support disbursed under the scheme. Between 2020-21 and 2022-23, over 10 crore beneficiaries have been covered under the scheme. This was due to the expansion of the scheme in 2019. When the scheme was initially announced in February 2019, it was designed to include famer families with cultivable land up to two hectares.[25] In May 2019, the scheme was expanded to include all land holding eligible farmer families.[26] It was estimated that with the expansion, the number of beneficiaries covered would expand to over 14 crore with an estimated expenditure of Rs 87,218 crore in 2019-20.[26] However, since its expansion both the coverage and the expenditure under the scheme has been lower than the initial estimates. In 2022-23, the central government spent Rs 58,254 crore under the scheme which was 13% lower compared to 2021-22. The Ministry noted that expenditure in 2022-23 declined over the previous year because of mandatory land seeding for farmers and seeding of Aadhaar with active bank accounts.[27]

The Standing Committee on Agriculture (2020) noted that some of the issues in the implementation of PM KISAN included: (i) non-availability of land records in some states, (ii) non-transference of land to heirs of deceased landholders, (iii) community owned land in north-eastern region, (iv) incorrect bank details, and (v) slow Aadhaar authentication of data.[28] The Committee also observed that benefits under the scheme were not available to tenant farmers who constitute a significant share of landless farmers in several states.[28] It recommended the Ministry to examine the possibility of covering landless and tenant farmers under the scheme in coordination with state governments. For instance, Odisha has been implementing the Krushak Assistance for Livelihood and Income Augmentation Scheme under which vulnerable cultivators/ landless agricultural labourers are eligible to get Rs 10,000 per family per year.[29]

International Trade

Trade restrictions on agricultural produce has been a persistent issue in the sector. On the one hand, the government restricts export of certain agricultural commodities to manage its availability and domestic prices. On the other hand, such exports affect farmer interests as they are unable to sell at competitive prices in the international market. Table 6 looks at the certain trade restrictions in the past year. In 2023, export restrictions were levied on onions, parboiled rice, and sugar. Some of these restrictions were relaxed in subsequent months.

Table 6: Certain restrictions on trade of agricultural produce in 2023

Date	Action
June 2023	Basic import duty on refined soyabean oil and refined sunflower oil reduced from 17.5% to 12.5% till March 31, 2024.[30]
July 2023	Export of non-basmati white rice prohibited. Earlier it was free to export with 20% duty. It constitutes around 25% of India's total rice exports.[31] Later, exports were allowed to countries like Nepal, Cameroon, Malaysia, Philippines, Seychelles, Core d'Ivore, Republic of Guinea, UAE, Bhutan, Singapore, and Mauritius.[32]
August 2023	Export duty of 20% imposed on export of parboiled rice until March 31, 2024.[32]
October 2023	Sugar export restrictions extended till further orders.[32]
October 2023	Minimum export price of USD 800 per metric tonne imposed on onion exports (until December 31, 2023).[33]
December 2023	Onion exports prohibited until March 31, 2024.[34]

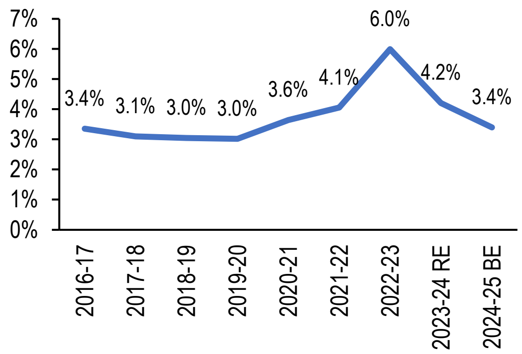
Sources: Ministry of Food and Public Distribution, Press Information Bureau; PRS.

Inputs for cultivation

Cultivation of crops requires several inputs such as seeds, fertilisers, pesticides, and reliable water supply for irrigation. We discuss some of these inputs below.

Fertiliser subsidy and import dependence: The Department of Agriculture and Farmers Welfare is responsible for projecting the demand of fertilisers, and fixing nutrient-based targets.[35] The Department of Fertilisers is responsible for planning the production and import of fertilisers.[35] Fertiliser subsidy is paid to manufacturers and importers who sell fertilisers to farmers at less than market prices.[36]

Figure 6: Expenditure on fertiliser subsidy as a percentage of total expenditure of the Union Budget



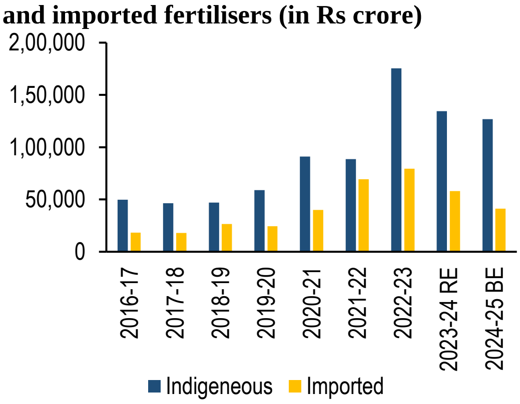
Sources: Union Budget Documents for various years; PRS.

In 2024-25, around Rs 41,000 crore is expected to be spent on subsidising imported fertilisers. This accounts for a quarter of total fertiliser subsidy expenditure. In the production of fertilisers, India is heavily dependent on imports for procuring raw materials.[36] The 15th Finance Commission had noted that such dependence makes India vulnerable to volatility in international prices and makes fertiliser subsidies unsustainable.[36] To cushion the effects of fluctuations of international prices of fertilisers and raw materials, the Committee (2022) recommended that the Department of Fertilizers: (i) diversify import sources by signing long-term agreements through PSUs, and (ii) monitor international prices and maintain a buffer stock to control for sudden fluctuations.[37]

The Standing Committee (2020) also noted the rising fertiliser subsidy bill over the years.[38] It noted that while it is necessary to provide the subsidy, it is also the government's responsibility to contain this expenditure without increasing fertiliser prices.[38] The Committee recommended that the government should take all possible steps to reduce its expenditure on subsidy by: (i) modernising fertiliser manufacturing plants, (ii) adopting best manufacturing practices and strict energy norms, and (iii) building a strong research and development base for continuously upgrading the manufacturing technology, so as to reduce the manufacturing cost.[38] It noted that several manufacturing plants were operating with old technology which led to inefficiencies. The cost of such inefficiencies is being borne by the government. It recommended that farmers should receive the subsidy directly in their bank accounts with manufacturers free to sell fertilisers as per their own system.[38] In October 2016, the Department of Fertilisers introduced the DBT system for releasing subsidy on various fertiliser grades to fertiliser companies.[39] Subsidy is released to companies based on actual sales made by retailers to the farmers.[39] According to the central government, this has helped to reduce overcharging by retailers through receipts generated by point of sale machines.[40]

Nano urea and soil health: Over-use and imbalanced use of fertilisers, results in the degradation of soil health.[41] In 2019-20, the ratio of applying nitrogen, phosphorous and potassium (NPK) was at 7:3:1 as compared to the generally accepted ideal ratio of 4:2:1.[42,43] The Indian Farmers Fertilizer Cooperative Limited (IFFCO) has developed nanotechnology-based nano urea fertiliser to address the imbalanced and excessive use of conventional urea.[42] The government has included nano-urea in the monthly supply plan issued by the Department, and it is being made available at PM Kisan Samridhi Kendras.[44]

Figure 7: Subsidy expenditure on indigenous and imported fertilisers (in Rs crore)



Sources: Budget Documents for various years; PRS.

Irrigation: As of 2019-20, about 53% of the total cropped area depended on irrigation.[45] Most of the freshwater available on the earth is available as groundwater.[46] Agriculture is the largest consumer of groundwater resources and accounts for 87% of the total annual groundwater extraction.[47]

The Pradhan Mantri Krishi Sinchai Yojana was launched in 2015 to increase the coverage of the area under irrigation.[48,49] Under the Per Drop More Crop component of the scheme (now implemented under Rashtriya Krishi Vikas Yojana), the government provides marginal farmers with financial assistance worth 55% of the cost of installing micro-irrigation systems.[50] Other farmers are provided with a financial incentive of 45%.[50] Between 2015-16 and 2021-22, an area of 67.46 lakh hectare has been covered under micro irrigation.[51]

Water intensive crops in water-scarce regions

Several water-intensive crops such as paddy and sugarcane are grown in districts that face a scarcity of water. Most of the country's irrigation facilities are utilised by paddy and sugarcane.[52] This depletes water availability for other crops. Pressure on water due to sugarcane cultivation in states like Maharashtra has become a serious concern.[52] In certain regions, groundwater use has reached a critical and overexploited stage. In the past, it has been recommended to shift some area used for cultivation of water intensive crops such as sugarcane to less water intensive crops.[52]

The Department of Agriculture and Farmers Welfare is implementing a Crop Diversification Programme under Rashtriya Krishi Vikas Yojana to divert the area of water intensive paddy crop to alternative crops like pulses, oilseeds, coarse cereals, nutri-cereals, and cotton.[53] Assistance is being provided in the form of demonstrations for alternate crops, farm mechanisation, and site-specific activities.[54]

Power subsidies for irrigation: Electric pumps are used to draw water from below the ground to irrigate fields. Electricity for such use is subsidised in many parts of the country so as to reduce the cost of agriculture. In certain states, the supply of electricity for agriculture is free, without consumption limits. The Standing Committee on Water Resources (2022) noted that subsidised electricity encouraged farmers to grow water-intensive crops in water-scarce areas.[55] The Committee in 2023 recommended that the Department of Water Resources, River Development, and Ganga Rejuvenation engage with the Department of Agriculture and Farmers Welfare to encourage less water-intensive crops and cultivation patterns.[56]

Such subsidies also impact government finances. Power subsidy is provided in various ways: (i) directly transferring funds from the government to distribution companies (discoms) and (ii) by charging certain consumers higher than the cost of supply (cross subsidy). In the past few years discoms have reported persistent losses, and have been bailed out by the state and central governments.[57,58] In 2022-23, state owned discoms registered a loss of Rs 68,833 crore.[57] In the past, various bailout packages were introduced to reduce financial losses and improve operational performance of state-owned discoms.[58]

To address the question of affordable electricity for consumers and a cost-reflective pricing mechanism, direct benefit transfer (DBT) of subsidy was proposed under the draft Electricity (Amendment) Bill, 2020.[59] The draft Bill proposed that tariff for retail sale of electricity must be determined without accounting for government subsidy. It provided for electricity subsidy to be paid directly to consumers.[59]

Agriculture marketing

Agriculture markets in India are regulated. State governments have established Agriculture Produce Marketing Committees (APMCs) to ensure fair trade between buyers and sellers, and for effective price discovery. APMCs regulate trade by: (i) providing licenses to traders/ commission agents, (ii) levying market fees/ cess on sale of agriculture produce in the APMC market, and (iii) providing the necessary infrastructure within markets to facilitate trade.[60] However, these markets face several issues. For instance, most APMCs have a limited number of traders, which leads to cartelisation and reduces competition.[60] Traders also make undue deductions in the form of commission charges and market fees.[60] The Standing Committee on Agriculture (2019) had observed that remunerative pricing for farmers could not be ensured unless the marketing platforms for farm produce are increased and functioning of APMCs is made transparent.[60] The Economic Survey (2023-24) observed that the average area served by mandis is around 434 sq km.[61] This is much higher than the recommendation of the National Commission on Farmers which suggested a market within a 5 km radius (with market area of around 80 sq km).

Electronic National Agricultural Market: In 2016, the central government launched the National Agriculture Market (e-NAM), an electronic trading portal.[62] It seeks to connect the existing APMC mandis to create a unified national market for agricultural commodities.[62] To propose mandis for e-NAM a state must have: (i) specific provision for e-auction/ electronic trading in their respective APMC Act as a mode of price discovery, (ii) single trading license valid across the state, and (iii) single point of levy of market fee across the state.[63]

As of June 30, 2024, 1,389 mandis across 27 states/ UTs have been registered on the platform with 1.72 lakh unified licenses being issued.[64] As of December 31, 2023, trade worth Rs 3.2 lakh crore has been recorded on the platform. 1.8 crore farmers and 2.5 lakh traders have also been registered on the platform.[65] The Standing Committee on Agriculture has on several instances suggested that all mandis across all states be integrated with e-NAM at the earliest.[20,66]

In September 2020, Parliament had passed three laws to: (i) facilitate barrier-free trade of farmers' produce outside the markets notified under the various state APMC laws, (ii) define a framework for contract farming, and (iii) impose stock limits on agricultural produce only if there is a sharp increase in retail prices.[67,68,69] The laws were repealed in 2021 following protests by farmers and a stay implemented by the Supreme Court.[70]

The Standing Committee on Agriculture (2019) had noted that the availability of a transparent, easily accessible, and efficient marketing platform is a pre-requisite to ensure remunerative prices for farmers.[60] Small and marginal farmers (who constitute a majority of farming community) rely on middlemen or shops to sell their produce below MSP.[60] This is due to issues such as distance to the nearest APMC market and lack of transportation facilities.[60]

The central government released the Model Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Act, 2017 in April 2017.[71,72] The model Act seeks to: (i) enable to sale of agricultural produce at the place of the farmer's choice, (ii) rationalise market fee and commission charges, and (iii) remove the concept of notified market area in relation to enforcement of regulation by Agricultural Produce and Livestock Market Committee. As of November 2019, Arunachal Pradesh had adopted the model Act, while Uttar Pradesh, Chhattisgarh, and Punjab have adopted major provisions of the Act.[73]

A futures market for agricultural commodities can help in price discovery and risk management.[74] Futures are standardized, exchange traded contracts for buying/selling a standardized quantity of a particular commodity at a pre-decided price on a future date. Farmers can benefit from price signals from futures market even if they do not directly participate in the market themselves.[74] The National Commodity and Derivatives Exchange Limited (NCDEX) is an exchange which provides agriculture commodity derivatives.[75] Commodity derivatives involving cereals, pulses, oil and oil seeds, and fibres are traded on the exchange.

---

[1] Brief Organisational History of the Department, https://agriwelfare.gov.in/Documents/org_history_2017.pdf.

[2] 2023 Southwest Monsoon End of Season Report, Ministry of Earth Sciences, https://internal.imd.gov.in/press_release/20231001_pr_2555.pdf.

[3] Statistical Report on Value of Output from Agriculture and Allied Sectors, Ministry of Statistics and Programme Implementation, 2024, https://www.mospi.gov.in/sites/default/files/publication_reports/Brochure_2024.pdf.

[4] Annual Report 2022-23, Coastal Aquaculture Authority, https://caa.gov.in/uploaded/doc/annualreport/AR.pdf.

[5] Annual Report 2021-22, The Marine Products Export Development Authority, https://mpeda.gov.in/wp-content/uploads/2023/01/Annual%20Report%20PDF-21-22.pdf.

[6] The National Food Security Act. 2013, https://www.indiacode.nic.in/bitstream/123456789/2113/1/201320.pdf.

[7] "Why farmers are protesting: Behind reluctant diversification in Punjab — and MSP law demand — a litany of loss", The Indian Express, February 25, 2024, https://indianexpress.com/article/cities/chandigarh/farmers-protesting-diversification-punjab-msp-law-demand-litany-loss-9179474/.

[8] Volume II, Status of Farmers' Income: Strategies for Accelerated Growth, Report of the Committee on Doubling Farmers' Income, August 2017, https://agriwelfare.gov.in/Documents/DFI%20Volume%202.pdf.

[9] Volume IV, Post-production interventions: Agricultural Marketing, Report of the Committee on Doubling Farmers' Income, August 2017, https://agriwelfare.gov.in/Documents/DFI%20Volume%204.pdf.

[10] Volume I, March of Agriculture Since Independence and Growth Trends, Report of the Committee on Doubling Farmers' Income, August 2017, https://agriwelfare.gov.in/Documents/DFI%20Volume%201.pdf.

[11] Fact Sheet, Household Consumption Expenditure Survey August 2022 – July 2023, Ministry of Statistics and Programme Implementation, https://www.mospi.gov.in/sites/default/files/publication_reports/Factsheet_HCES_2022-23.pdf.

[12] Chapter 8: Agriculture and Food Management, Economic Survey 2022-23, https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap08.pdf.

[13] Legal Guarantee for Procurement of Crops at MSP, Unstarred Question No – 2268, Ministry of Agriculture and Farmers Welfare, Rajya Sabha, December 17, 2021, https://sansad.in/getFile/annex/255/AU2268.pdf?source=pqars.

[14] Price Policy for Kharif Crops, The Marketing Season 2023-24, Commission for Agricultural Costs and Prices, March 2023, https://cacp.da.gov.in/ViewReports.aspx?Input=2&PageId=39&KeyId=818.

[15] Serving Farmers ad Saving Farming, Fifth Report, National Commission on Farmers, October 4, 2006, https://agriwelfare.gov.in/sites/default/files/NCF5%20Vol.-1%20%281%29.pdf.

[16] Report No. 68, 'Promotion of Climate Resilient Farming', Standing Committee on Agriculture, Animal Husbandry and Food Processing, Lok Sabha, February 7, 2024, https://sansad.in/getFile/lsscommittee/Agriculture,%20Animal%20Husbandry%20and%20Food%20Processing/17_Agriculture_Animal_Husbandry_and_Food_Processing_68.pdf?source=loksabhadocs.

[17] "Pradhan Mantri Fasal Bima Yojana (PMFBY), Ministry of Agriculture, https://pmfby.gov.in/pdf/Revamped%20Operational%20Guidelines_17th%20August%202020.pdf.

[18] Revamped Operational Guidelines, Pradhan Mantri Fasal Bima Yojana, Ministry of Agriculture and Farmers Welfare, https://pmfby.gov.in/pdf/Revamped%20Operational%20Guidelines_17th%20August%202020.pdf.

[19] Unstarred Question No. 1266, Ministry of Agriculture and Farmers' Welfare, Lok Sabha, February 9, 2021, https://sansad.in/getFile/loksabhaquestions/annex/175/AU1266.pdf?source=pqals#:~:text=(a)%20to%20(d)%3A,decision%20regarding%20implementing%20the%20scheme.

[20] Report No. 51, "Demands for Grants 2023-24", Standing Committee on Agriculture, Animal Husbandry and Food Processing, Lok Sabha, March 13, 2024, https://sansad.in/getFile/lsscommittee/Agriculture,%20Animal%20Husbandry%20and%20Food%20Processing/17_Agriculture_

Animal_Husbandry_and_Food_Processing_51.pdf?source=loksabhadocs.

[21] A Study on Evaluation of Mega Awareness Campaign of Pradhan Mantri Fasal Bima Yojana (PMFBY), National Institute of Agricultural Extension Management, 2023, https://pmfby.gov.in/compendium/General/Report_on_Evaluation_of_PMFBY.pdf.

[22] Agricultural Statistics at a Glance 2022, Ministry of Agriculture and Farmers Welfare, https://agriwelfare.gov.in/Documents/CWWGDATA/Agricultural_Statistics_at_a_Glance_2022_0.pdf.

[23] "Pradhan Mantri Kisan Samman Nidhi Scheme", Ministry of Agriculture and Farmers Welfare, Press Information Bureau, August 8, 2023, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1946816.

[24] Operational Guidelines, Pradhan Mantri Kisan Samman Nidhi, Ministry of Agriculture and Farmers Welfare, revised as on March 29, 2020, https://pmkisan.gov.in/Documents/RevisedPM-KISANOperationalGuidelines(English).pdf.

[25] "Pradhan Mantri Kisan Samman Nidhi announced to provide assured income support to small and marginal farmers", Press Information Bureau, Ministry of Finance, February 1, 2019, https://pib.gov.in/Pressreleaseshare.aspx?PRID=1562184.

[26] "PM-KISAN Scheme extension to include all eligible farmer families irrespective of the size of land holdings", Press Information Bureau, Cabinet, May 31, 2019, https://pib.gov.in/PressReleasePage.aspx?PRID=1573023.

[27] Unstarred Question No. 429, Ministry of Agriculture and Farmers Welfare, Lok Sabha, December 5, 2023, https://sansad.in/getFile/loksabhaquestions/annex/1714/AU429.pdf?source=pqals.

[28] Report no. 9, 'Demand for Grants (2020-21), Standing Committee on Agriculture and Farmers' Welfare', Lok Sabha, March 3, 2020, https://loksabhadocs.nic.in/lsscommittee/Agriculture,%20Animal%20Husbandry%20and%20Food%20Processing/17_Agriculture_9.pdf.

[29] Krushak Assistance for Livelihood and Income Augmentation, Department of Agriculture and Farmers' Empowerment, as accessed on June 11, 2024, https://kalia.odisha.gov.in/index1.html.

[30] "Consumers to pay less for edible oils with reduction in Basic Import Duty on Refined Soyabean oil and Refined Sunflower Oil by 5%", Press Information Bureau, Ministry of Commerce Affairs, Food and Public Distribution, June 15, 2023, https://www.pib.gov.in/PressReleasePage.aspx?PRID=1932542.

[31] "Centre amends Export Policy of Non Basmati White Rice to ensure adequate domestic availability at reasonable prices", Press Information Bureau, Ministry of Commerce Affairs, Food and Public Distribution, July 20, 2023, https://www.pib.gov.in/PressReleasePage.aspx?PRID=1941139.

[32] "Prices of Essential Food Commodities to remain stable in festival season, as the government takes a series of steps for price stabilisation: Secretary, Department of Food and Public Distribution", Press Information Bureau, Ministry of Commerce Affairs, Food and Public Distribution, October 19, 2023, https://www.pib.gov.in/PressReleasePage.aspx?PRID=1969128.

[33] "Government notifies Minimum Export Price (MEP) of USD 800 per Metric Ton on onion export to maintain domestic availability", Press Information Bureau, Ministry of Commerce Affairs, Food and Public Distribution, October 28, 2023, https://www.pib.gov.in/PressReleasePage.aspx?PRID=1972618.

[34] "Centre puts Onion under prohibition from 8th December, 2023 till 31st March, 2024 to ensure availability of onion to consumers", Press Information Bureau, Ministry of Commerce Affairs, Food and Public Distribution, December 11, 2023, https://www.pib.gov.in/PressReleasePage.aspx?PRID=1985229.

[35] The Government of India (Allocation of Business) Rules, 1961, amended as of April 3, 2024, Cabinet Secretariat, https://cabsec.gov.in/writereaddata/allocationbusinessrule/completeaobrules/english/1_Upload_3861.pdf.

[36] Report of the 15th Finance Commission, Volume-III, The Union, October 2020, https://fincomindia.nic.in/asset/doc/commission-reports/XVFC-Vol%20III-Union.pdf.

[37] Report No. 32, 'Demand for Grants 2022-23', Standing Committee on Chemicals and Fertilizers, Lok Sabha, March 21, 2022, https://sansad.in/getFile/lsscommittee/Chemicals%20&%20Fertilizers/17_Chemicals_And_Fertilizers_32.pdf?source=loksabhadocs.

[38] Report No. 5, 'Study of System of Fertiliser Subsidy', Standing Committee on Chemicals and Fertilizers, Lok Sabha, March 2020, https://loksabhadocs.nic.in/lsscommittee/Chemicals%20&%20Fertilizers/17_Chemicals_And_Fertilizers_5.pdf.

[39] Direct Benefit Transfer, Ministry of Chemicals and Fertilisers, as accessed on February 11, 2023, https://www.fert.nic.in/dbt.

[40] "DBT on Fertilizer Subsidy", Press Information Bureau, Ministry of Chemical and Fertilizers, April 1, 2022, https://pib.gov.in/PressReleasePage.aspx?PRID=1812313.

[41] Report No. 43, "Planning for Fertilizers Production and Import Policy on Fertilizers Including GST and Import Duty Thereon", Standing Committee on Chemicals and Fertilizers, Lok Sabha, August 9, 2023, https://sansad.in/getFile/lsscommittee/Chemicals%20&%20Fertilizers/17_Chemicals_And_Fertilizers_43.pdf?source=loksabhadocs.

[42] Report No. 39, 'Nano-Fertilizers for Sustainable Crop Production and Maintaining Soil Health', Standing Committee on Chemicals and Fertilisers, Lok Sabha, March 21, 2023, https://loksabhadocs.nic.in/lsscommittee/Chemicals%20&%20Fertilizers/17_Chemicals_And_Fertilizers_39.pdf.

[43] Crop Response and Nutrient Ratio, Policy Paper No. 42, National Academy of Agricultural Sciences, https://naas.org.in/Policy%20Papers/policy%2042.pdf.

[44] Unstarred Question No. 191, 'Promoting Nano Fertilisers', Ministry of Chemicals and Fertilisers, Rajya Sabha, December 5, 2023, https://sansad.in/getFile/annex/262/AU191.pdf?source=pqars#:~:text=The%20Standing%20Committee%20on%20Chemicals,.

[45] Agricultural Statistics at a Glance 2022, Ministry of Agriculture and Farmers' Welfare, April 2023, https://agriwelfare.gov.in/Documents/CWWGDATA/Agricultural_Statistics_at_a_Glance_2022_0.pdf.

[46] Earth Observatory Water Cycle Overview, National Aeronautics and Space Observation (NASA), https://gpm.nasa.gov/education/articles/earth-observatory-water-cycle-overview.

[47] National Compilation on Dynamic Groundwater Resources of India 2023, Central Ground Water Board, Ministry of Jal Shakti, September 2023, https://cgwb.gov.in/cgwbpnm/public/uploads/documents/17056512151889452705file.pdf.

[48] About PMKSY, Ministry of Agriculture and Farmers' Welfare, https://pmksy.gov.in/AboutPMKSY.aspx.

[49] "Targets Achieved under Pradhan Mantri Krishi Sinchai Yojana", Press Information Bureau, Ministry of Jal Shakti, March 23, 2023, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1910076.

[50] "Per Drop More Crop", Ministry of Agriculture and Farmers' Welfare, Press Information Bureau, December 12, 2023, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1985487#:~:text=PDMC%20scheme%20focuses%20on%20enhancing,Micro%20Irrigation%20under%20the%20Scheme..

[51] Annual Report 2022-23, Ministry of Agriculture and Farmers Welfare,https://agriwelfare.gov.in/Documents/annual_report_english_2022_23.pdf.

[52] Report of the Task Force on Sugarcane and Sugar Industry, NITI Aayog, March 2020,

https://www.niti.gov.in/sites/default/files/2021-08/10_Report_of_the_Task_Force_on_Sugarcan_%20and_Sugar_Industry_0.pdf.

[53] Unstarred Question No. 2574, Ministry of Agriculture and Farmers Welfare, Rajya Sabha, August 11, 2023, https://sansad.in/getFile/annex/260/AU2574.pdf?source=pqars.

[54] "Crop Diversification", Ministry of Agriculture and Farmers' Welfare, Press Information Bureau, March 3, 2020, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1605057.

[55] Report No. 18, 'Action Taken by the Government on the Observations/Recommendations contained in the Fifteenth Report of the Standing Committee on Water Resources', Standing Committee on Water Resources, December 20, 2022, https://loksabhadocs.nic.in/lsscommittee/Water%20Resources/17_Water_Resources_18.pdf.

[56] Report No. 22, 'Groundwater: A Valuable but Diminishing Resource', Standing Committee on Water Resources, Lok Sabha, March 20, 2023, https://loksabhadocs.nic.in/lsscommittee/Water%20Resources/17_Water_Resources_22.pdf.

[57] Report on Performance of Power Utilities 2022-23, Power Finance Corporation, April 2024, https://pfcindia.com/ensite/DocumentRepository/ckfinder/files/Operations/Performance_Reports_of_State_Power_Utilities/Report%20Database%202022-23%20-%20updated%20up%20to%20April%202024EntityApr.pdf.

[58] Diagnostic Study of the Power Distribution Sector, NITI Aayog, April 2019, https://www.niti.gov.in/sites/default/files/2019-08/Final%20Report%20of%20the%20Research%20Study%20on%20Diagnostic%20Study%20for%20power%20Distribution_CRISIL_Mumbai.pdf.

[59] The Draft Electricity (Amendment) Bill, 2020, Ministry of Power, April 17, 2020, https://prsindia.org/files/bills_acts/bills_parliament/1970/Draft_Electricity_Amendment_Bill_2020_for_comments.pdf.

[60] Report No. 62, Standing Committee on Agriculture (2018-19): 'Agriculture Marketing and Role of Weekly Gramin Haats', Lok Sabha, January 3, 2019, https://loksabhadocs.nic.in/lsscommittee/Agriculture,%20Animal%20Husbandry%20and%20Food%20Processing/16_Agriculture_62.pdf.

[61] Chapter 9, Agriculture and Food Management, Economic Survey 2023-24, July 2024, https://www.indiabudget.gov.in/economicsurvey/doc/echapter.pdf.

[62] "eNAM: Transforming Agricultural Trade into a Seamless Experience", Press Information Bureau, Ministry of Agriculture and Farmers Welfare, February 20, 2024, https://pib.gov.in/FactsheetDetails.aspx?Id=149061#:~:text=The%20initiative%20was%20launched%20by,system%20and%20online%20payment%20facility.

[63] "National Agriculture Market (e-NAM)", Press Information Bureau, Ministry of Agriculture and Farmers Welfare, April 14, 2023, https://pib.gov.in/PressNoteDetails.aspx?NoteId=151386&ModuleId=3.

[64] No. of Unified Licenses, eNAM Dashboard, as accesses July 31, 2024, https://enam.gov.in/web/state-unified-license/no-of-unified-licenses.

[65] Starred Question No. 55, Lok Sabha, Ministry of Agriculture and Farmers' Welfare, February 6, 2024, https://sansad.in/getFile/loksabhaquestions/annex/1715/AS55.pdf?source=pqals.

[66] Report No. 37, 'Demands for Grants 2022-23', Standing Committee on Agriculture, Animal Husbandry and Food Processing, Lok Sabha, March 24, 2022, https://loksabhadocs.nic.in/lsscommittee/Agriculture,%20Animal%20Husbandry%20and%20Food%20Processing/17_Agriculture_Animal_Husbandry_and_Food_Processing_37.pdf.

[67] The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Bill, 2020, https://prsindia.org/files/bills_acts/bills_parliament/2020/Farmers%20(Empowerment%20and%20protection)%20bill,%202020.pdf.

[68] The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020, https://prsindia.org/files/bills_acts/bills_parliament/2020/Farmers'%20Produce%20Trade%20and%20Commerce%20bill,%202020.pdf.

[69] The Essential Commodities (Amendment) Act, 2020, https://prsindia.org/files/bills_acts/bills_parliament/2020/Essential%20Commodities%20(Amendment)%20Act,%202020.pdf.

[70] The Farm Laws Repeal Bill, 2021, https://prsindia.org/files/bills_acts/bills_parliament/2021/Farm%20Laws%20Repeal%20Bill,2021.pdf.

[71] "Agriculture Produce Market Committee", Press Information Bureau, Ministry of Agriculture and Farmers Welfare, August 1, 2017, https://pib.gov.in/PressReleasePage.aspx?PRID=1497995.

[72] The -------State /UT Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017, Ministry of Agriculture and Farmers Welfare, April 24, 2017, https://dmi.gov.in/Documents/APLM_Act.pdf.

[73] Unstarred Question No. 291, Lok Sabha, Ministry of Agriculture and Farmers Welfare, November 19, 2019, https://loksabha.nic.in/Questions/QResult15.aspx?qref=6495&lsno=17.

[74] "Linking Farmers with Markets", Press Information Bureau, Ministry of Agriculture and Farmers' Welfare, February 4, 2020, https://pib.gov.in/PressReleasePage.aspx?PRID=1601897.

[75] NCDEX Overview, National Commodity & Derivatives Exchange Limited, https://ncdex.com/about/ncdex-overview.